

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,736	03/04/2004	Wen-Pao Tseng	3223-49	5318
7.	590 12/13/2005		EXAMINER	
TROXELL LAW OFFICE PLLC			DOAN, JENNIFER	
Suite 1404			ART UNIT	PAPER NUMBER
5205 Leesburg	Pike		ART UNIT	PAPER NUMBER
Falls Church, VA 22041			2874	
			DATE MAILED: 12/13/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

			N			
	Application No.	Applicant(s)	<del>- //</del>			
	10/791,736	TSENG, WEN-PAO				
Office Action Summary	Examiner	Art Unit				
	Jennifer Doan	2874				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet	with the correspondence address	S			
A SHORTENED STATUTORY PERIOD FOR REI WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMU R 1.136(a). In no event, however, may iod will apply and will expire SIX (6) Manual atute, cause the application to become	NICATION.  y a reply be timely filed  IONTHS from the mailing date of this commun  B ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 04	4 March 2004.					
	his action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-12 is/are pending in the applicating 4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-12 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and	drawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exam  10)☒ The drawing(s) filed on 04 March 2004 is/are  Applicant may not request that any objection to t  Replacement drawing sheet(s) including the corr  11)☐ The oath or declaration is objected to by the	e: a)⊠ accepted or b)⊡ o the drawing(s) be held in abe rection is required if the drawi	yance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.	` '			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the papplication from the International Burn * See the attached detailed Office action for a limit of the papplication from the limit of the papplication from the International Burn * See the attached detailed Office action for a limit of the papplication from the limit of the limit of the limit of the papplication from the limit of the	ents have been received. ents have been received in riority documents have be eau (PCT Rule 17.2(a)).	n Application No en received in this National Stag	e			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application (PTO-152) 				

#### **DETAILED ACTION**

## **Drawings**

1. The drawings, filed on 03/04/04, are accepted.

### Specification

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah (U.S. Patent 5,479,275) in view of Bernard (U.S. Patent 5,986,728).

With respect to claim 1, Abileah (figure 11) discloses an improved structure of a light wave-guide device essentially comprised of a backlight module including a reflector mask (74), multiple light sources (70), multiple optical films (65) and a protector sheet

Page 3

(63) arranged in sequence from inside out; wherein, each light source being made of stripe or U-shape or any other continuously curved light tube (figure 6), and disposed at a proper spacing at where between the reflector mask (74) and a lower diffuser sheet (61) is characterized by that the backlight module being provided with at least one optical wave-guide device (as an integral lens); light from each light source passing through the optical wave-guide device being properly refracted and reflected to evenly diffuse through the lower diffuser sheet (61) to eliminate the dark band formed between abutted light sources (70); spacing between light source and the diffuser plate being reduced; and the thickness of the backlight module being also reduced in meeting compact requirements (see figure 11).

Abileah does not explicitly disclose multiple recesses being provided to the optical wave-guide device to accommodate respective light source.

However, Bernard (figure 3) teaches multiple recesses being provided to the optical wave-guide device (30, 30a) to accommodate respective light source. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the optical waveguide device of Abileah to have multiple recesses to accommodate the respective light source (accordance with the teaching of Bernard) for the purpose of concentrating light at its center to effectively transmitting the light signals.

With respect to claims 2 and 3, Abileah (figure 11) discloses an improved structure of a light wave-guide device, wherein the optical wave-guide device (65) is

Application/Control Number: 10/791,736

Art Unit: 2874

related to a structure in plate shape and at least one surface of the optical wave-guide device is embossed.

With respect to claim 4, Abileah (figure 11) discloses an improved structure of a light wave-guide device, wherein the surface of the optical wave-guide device (65) facing the lower diffuser sheet (61) or the surface of the recess of the optical wave-guide device (65) or the surface of the optical wave-guide device (65) facing away from the lower diffuser locally or entirely embossed.

With respect to claim 5, Abileah (figure 11) discloses an improved structure of a light wave-guide device, wherein the embossment is made at least one straight line or curve or the combination of both in a form of V-, U-, or C-shaped cut.

With respect to claim 6, Abileah (figure 11) discloses an improved structure of a light wave-guide device, wherein at least one surface of the optical wave-guide device is locally or entirely treated with ink, matted, or printed, or distributed with concave and convex points in either round, rectangular, diamond or polygonal form.

With respect to claims 7-12, Abileah discloses Abileah (figure 11) discloses an improved structure of a light wave-guide device, the optical wave-guide device is in the structure of a transparent sheet, a white sheet a mat sheet; wherein the optical wave-guide device is made of Polycarbonate (PC), or Polymethyl methacrylate (PMMA), or Polyethylene Terephthalate (PET) in to a transparent stick structure or in to a white stick structure or Polymethyl methacrylate (PMMA) added with diffusion agent into a matted stick structure (column 11, lines 14-19).

Application/Control Number: 10/791,736

Art Unit: 2874

#### **Conclusion**

Page 5

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Doan

Patent examiner

Termi Les Docen

December 7, 2005